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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/04/2003

Philip Houghton

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MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER

TIEU, BINH KIEN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/654,798	Applicant(s) HOUGHTON ET AL.	
	Examiner BINH K. TIEU	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17, 19-34 and 36-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-17, 30-34 and 36-47 is/are allowed.
- 6) ☒ Claim(s) 19, 20 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 21-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290, *as cited in the previous Office Action*) in view of Kallstenius (Pub. No.: US 2005/0041692).

Regarding claim 19, Couillard teaches a method of synchronizing a transmitting computing device to a receiving computing device of a packet switched telecommunication network comprising:

requesting an absolute time from a network time protocol (NTP) server;

receiving said absolute time; and

inputting an adjustment parameter into a frequency controlling hardware of said transmitting computing device or said receiving computing device (paragraphs [0047]-[0052]).

It should be noticed that Couillard fails to clearly teach the features of requesting the absolute time from a server, using a Network Time Protocol (NTP); and input the adjustment parameter into a frequency controlling hardware of a frequency oscillator of said computing device to adjust a phase of said frequency oscillator. However, Kallstenius teaches such features paragraphs [0038] and [0059]-[0060] for a purpose of synchronizing the oscillator of client 16 with the timeserver.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of requesting the absolute time from a server, using a Network Time Protocol (NTP); and input the adjustment parameter into a frequency controlling hardware of a frequency oscillator of said computing device to adjust a phase of said frequency oscillator, as taught by Kallstenius, into view of Couillard in order to synchronize the oscillators of computer devices to the NTP server.

Regarding claim 25, Kallstenius further teaches limitations of the claim in paragraph [0036] and [0058]-[0059].

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Kallstenius (Pub. No.: US 2005/0041692) as applied to claim

19 above, and further in view of Michelson et al. (Pub. No.: US 2008/0031229, *also cited in the previous Office Action*).

Regarding claim 20, Couillard teaches all subject matters as claimed above, except for the feature of residential VoIP gateway. However, Michelson et al. ("Michelson") teaches such feature in paragraph [0022] for a purpose of establishing a VoIP call between a gateway and a soft switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of residential VoIP gateway, as taught by Michelson, into view of Couillard and Kallstenius in order to provide VoIP service to end users.

4. Claims 26-27 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Kallstenius (Pub. No.: US 2005/0041692) and Fischer et al. (Pub. No.: US 2002/0027886) as applied to claim 6 above, and further in view of Hostetter et al. (US Pat. No. 5,450,395) (Both Fischer and Hostetter references were also *cited in the previous Office Action*).

Regarding claim 26, Couillard teaches a method of transmitting higher bandwidth signals between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device by way of using network time protocol (NPT) server (paragraphs [0047]-[0052]).

Kallstenius teaches a client 16 requests absolute time by way using (transmitting) a network time protocol (NPT) message to timeserver 12 (see paragraph [0038]).

Fischer teaches a method of transmitting voice and voice band data and other higher bandwidth signals between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device (paragraphs [0084]-[0085] and [0387]).

It should be noticed that Couillard, Kallstenius and Fischer, in combination, fails to suggest using synchronization to improve signal to noise of two devices. However, Hostetter teaches a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized (col.1, lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized, as taught by Hostetter into view of Couillard, Kallstenius and Fischer in order to better quality of voice to voice-over-IP services.

Regarding claim 27, Fischer further teaches limitations of the claim in paragraph [0117].

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter et al. (US. Pat. #: 5,450,395) in view of Kallstenius (Pub. No.: US 2005/0041692) and Ransom et al. (Pub. No.: US 2003/0204756 *as cited in the previous Office Action*).

Regarding claim 28, Hostetter et al. (“Hostetter”) teaches a method of improving the signal to noise ratio of voice band data comprising synchronizing computing devices (col.1, lines 55-60).

Kallstenius teaches a client 16 requests absolute time by way using (transmitting) a network time protocol (NTP) message to timeserver 12 (see paragraph [0038]).

It should be noticed that Hostetter and Kallstenius fails to clearly teach the feature of syncing the computing devices to an NTP server. However, Ransom teaches such feature in paragraph [0122] for ensuring transferred messages having the correct time and their contents having accurate time.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of syncing the computing devices to an NTP server, as taught by Ransom, into view of Hostetter and Kallstenius in order to provide accurate time to the transmitted messages.

Allowable Subject Matter

6. Claims 11-17, 30-34 and 36-47 are allowed.
7. Claims 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 06/27/2008 have been fully considered but they are not persuasive.

A/. In response to the Applicant's argument on pages 10-15 concerning the rejection of claim 11 is moot. Therefore, claim 11 and its dependent claims have been allowed, as indicated above.

B/. In response to Applicant's arguments, see pages 15-19 concerning about new added features of amended claim 19 and feature of its dependent claim 25, the applicants should be referred to the new ground of rejection set forth above in this Office Action.

C/. In response to the Applicant's argument stated on pages 19 through 21 and pages 24 and 25 concerning the rejections of claims 26, 27 and 28 wherein the Applicants stated as followings:

"...Couillard does not teach "a network time protocol (NTP) server" as recited in Claim 26...Applicants respectfully submit that Hostetter does not teach "synchronizing performed to improve signal to noise ratio of said voice band data received at said first computing device and said second computer device," as recited in Claim 26. Hostetter, at col.1 lines 55-60 describes a signal to noise ratio of a carrier signal received by a CDMA receiver over a direct sequence spread spectrum. Therefore, Hostetter does not teach "synchronizing performed to improve signal to noise ratio of *said voice band data* received at said first computing device and said second computing device." (See Applicants argued on pages 20-21).

First, the Examiner agrees with the Applicants that Couillard does not teach the NTP server. Therefore, the Examiner cited the new reference of Kallstenius in the new ground rejection as stated above. Next, the Examiner respectfully disagrees with the Applicants' argued that **"...Hostetter, at col.1 lines 55-60 describes a signal to noise ratio of a carrier signal received by a CDMA receiver over a direct sequence spread spectrum. Therefore, Hostetter does not teach "synchronizing performed to improve signal to noise ratio of *said voice band data*..."** above. According to those skilled in the art to understand that voice band

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data, audio data or digitized data are not transmitted from an originating point to the other destination point by without any modulations and coding. They must be modulated or coded with a carrier signal having a desired transmit frequency or frequencies. The modulated carrier signal that contained the voice band data is then transmitted to the destination point through a telecommunication network (i.e., packets network, PSTN, Internet, etc.). Thus, it is clearly that Hostetter teaches the synchronization performed to improve signal to noise ratio of a carrier signal, which also means that to improve signal to noise ratio of the voice band data *because the carrier signal contained the voice band data.*

D/. In response to the Applicants' arguments stated from page 22 regarding to rejections of claims 40-42, the arguments are moot, claims 40-42 are indicated as allowed above.

With all remarks to the Applicants' arguments above, the Examiner believes that the rejections to claims 19-20 and 25-28 have been proper and permissible on the merits.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL CUSTOMER SERVICE FOR THE SUBSTITUTIONS OR COPIES.**

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/BINH K. TIEU/
Primary Examiner
Technology Division 2614

Date: September 12, 2008